

6 and 22 are allowable, except for being dependent upon a rejected base claim. In view of the following remarks and the attached Declaration, Applicants respectfully submit that all pending claims in the application are in condition for allowance.

The Official Action of December 17, 2001, rejected claims 17-21, 23 and 25-29 under 35 U.S.C. §102(b) as being anticipated by *Aharoni* (U.S. Patent No. 5,480,944); claims 24 and 30 under 35 U.S.C. §103(a) as being unpatentable over *Aharoni* in view of *Fisch* (U.S. Patent No. 5,760,163); claims 1-5, 7 and 9 under 35 U.S.C. §103(a) over *Aharoni* in view of *Meyer* (U.S. Patent No. 4,255,560); and claims 10-14 under 35 U.S.C. §103(a) as being unpatentable over *Aharoni* in view of *Meyer* and further in view of *Fisch*. For at least the reasons that follow, Applicants submit that the presently claimed invention is neither anticipated by nor rendered obvious by *Aharoni*, by itself, or in combination with *Fisch* and/or *Meyer*.

The presently claimed invention is directed to a thermoplastic copolyamide, a composition comprising thermoplastic copolyamide as a matrix, and a process for manufacturing the thermoplastic copolyamide. See specification at page 1, lines 3-7.

Aharoni relates to interpenetrating blends comprising a branched fractal three-dimensional polymer (FPs) species which comprises aromatic recurring units having inert or reactive moieties on the exterior thereof having linear polymeric chains passing through and interpenetrated with the fractal polymer (FR). *Aharoni* further relates to polymeric composites comprising a polymer matrix having dispersed therein the interpenetrating polymeric blends of the disclosed invention, and to articles of manufacture formed from said blends in polymeric composites. See *Aharoni* at column 1, lines 5-17.

More specifically, *Aharoni* is directed to a blend of linear polymers and an aromatic fractal polymer comprising one to two aromatic nuclei comprising at least three amine or acid functional groups. One aromatic nuclei cannot comprise both amine and acid functional groups. The blend of *Aharoni* further comprises branching aromatic monomers which comprise several amine and acid functional groups. Additionally, the blend includes extension aromatic monomeric units that comprise one amide functional group and one acid group and reactive moieties that comprise only one functional group, such as amine or acid. By using three different aromatic monomers, a fractal polymer is obtained that is considered to be non-reactive with end groups of the linear polymer of the polyamide matrix, compatible (i.e., having the same or about the same solubility parameters) and porous.

Aharoni does not, however, disclose or suggest the copolyamide of the present invention. That is, when the nuclei monomer, branching monomer and extension monomer of *Aharoni* are trimesic acid, 5-aminoisophthalic acid and p-aminobenzoic acid as set forth in the Examples of *Aharoni*, the two-dimensional representation of the resulting fractal polymer is as depicted in Figure 1 on page 4 of the attached Declaration of Professor Giuseppe Di Silvestro. (Due to shortness of time, Applicants were unable to file a signed copy of the Declaration. Applicants intend to file a signed copy of the Declaration in due course.) The resulting fractal polymer, unlike the presently claimed copolyamide, is an additive and not a matrix.

More specifically, the data presented in the attached Declaration show that the *Aharoni* polymer blend is rigid and cannot be used as a thermoplastic polymer matrix by

itself. Further, the data in the attached Declaration clearly indicate that the tree copolyamide of the present invention differs substantially in terms of its structural, chemical and physical properties when compared with the blends of *Aharoni*. That is, while the tree copolyamide of the present invention is a matrix, the blends of *Aharoni* cannot be used as a matrix alone. Further, while the copolyamide of the present invention has a high melt viscosity, the blend of *Aharoni* has high melt fluidity. Additionally, the chemical structure of the tree copolyamide of the present invention is substantially different from chemical structure of the fractal polymer of *Aharoni* (see Figure 1 vs. Figure 2 in the attached Declaration). As a result, the rheological and mechanical properties of the copolyamide of the present invention are also substantially different from those of the copolyamide of *Aharoni*. See, for example, sections (12) and (13) of the attached Declaration.

In view of the substantial structural, chemical and physical differences between the copolyamide of the present invention and *Aharoni*, Applicants respectfully submit that claims 1-30 are neither anticipated by *Aharoni* nor rendered obvious by *Aharoni* in view of *Meyer* and/or *Fisch*. For at least these reasons, Applicants respectfully request reconsideration and withdrawal of the §102 and §103 rejections.

Prompt and favorable examination on the merits is respectfully requested.

Should the Examiner have any questions concerning this paper or the application in general, Applicants invite the Examiner to telephone the undersigned at his earliest convenience.

Respectfully submitted,

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Attachment: Unexecuted Declaration of Dr. Giuseppe Di Silvestro